U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

FEB 09 1982

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

DPM 5376

MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.
SULLIVAN CHEMICAL CO., INC.	(213) 435-2332

ADDRESS (Number, Street, City, State, and ZIP Code)
1470 West Ninth St. Long Beach, CA 90813

CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS
Sodium Hydroxide-Sodium Nitrate-Chloride	SUL-KEM 74PS & 7301

CHEMICAL FAMILY	FORMULA
Caustic Nitrate	$NaOH \cdot NaNO_3 NaCl$

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Sodium Hydroxide CAUSTIC		NA
Sodium Nitrate OXIDIZER Proprietary Information		NA
Sodium Chloride		NA

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	NA	SPECIFIC GRAVITY (H_2O=1)	
VAPOR PRESSURE (mm Hg.)	NA	PERCENT, VOLATILE BY VOLUME (%)	NA
VAPOR DENSITY (AIR=1)	NA	EVAPORATION RATE (_____ =1)	NA
SOLUBILITY IN WATER	Hydroscopic		
APPEARANCE AND ODOR	Odorless white powder, flake or bead		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	Lel	Uel
NA	NA		

EXTINGUISHING MEDIA
Use large quantities of water on fires involving sodium nitrate

SPECIAL FIRE FIGHTING PROCEDURES
Contains sodium nitrate which will supply oxygen to a fire, thus suffocating-type extinguishers are of little value

UNUSUAL FIRE AND EXPLOSION HAZARDS
SUL-KEM 74-PS will not burn or explode but will promote combustion in combustible materials.

(Continued on reverse side)

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
Airborne dust 2mg/m^3

EFFECTS OF OVEREXPOSURE
Contact with skin, eyes or mucous membranes will cause severe burns

EMERGENCY AND FIRST AID PROCEDURES
Flush areas of contact with water for fifteen minutes. Remove contaminated clothing and do not re-use until thoroughly washed. In case of eye contact, see physician immediately.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

INCOMPATABILITY *(Materials to avoid)*
Combustible and reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
Oxygen and nitrogen oxides when sufficiently aerated.

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Flake or powder can be shoveled up, followed by a flushing with water and dilute acid (preferably acetic)

WASTE DISPOSAL METHOD
Discharge into sump to be neutralized (if liquid). Solid material should be put in drums and sent to a chemical dump.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*
Adequate ventilation for dust should be provided

VENTILATION	LOCAL EXHAUST	SPECIAL
YES	MECHANICAL *(General)*	OTHER

PROTECTIVE GLOVES: Rubber gloves	EYE PROTECTION: Face shields should be worn

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Store in dry area to avoid moisture pick-up

OTHER PRECAUTIONS
DO not add wet or damp salt to the molten bathh

HAZARD INFORMATION ON CAUSTIC ALKALI COMPOUNDS

Chemical Reactivity Data

Stable: Yes

Selfpolymerize: No

Hazardous Decomposition Products: None

Avoid Contacts with These Materials:
When handling flake caustic, avoid contact with such materials as aluminum, leather, wool, tin and zinc and alloys containing these metals.

Conditions to Avoid:
Avoid handling conditions which may allow for leaks and spills of caustic soda. Do not permit personnel to handle caustic soda without proper training or to work without protective equipment.

Health Hazards

Caustic soda and caustic potash are strong alkali and are dangerous when improperly handled. The solid caustic and concentrated solutions are destructive to tissues which they may contact, producing severe burns. Contact with the eyes, either in solid form or in solution, causes severe damage to the eye. Inhalation of the dust or mist of this compound is capable of causing injury to the entire respiratory tract. Swallowing usually results in severe injury.

First Aid Procedures

Ingestion:
Ingestion of caustic causes severe burns of mucous membranes of the mouth, throat, esophagus and stomach. Dilution of the chemical by drinking large quantities of water or milk may be attempted. After this, dilute vinegar or fruit juice may be given to accomplish neutralization. Vomiting may occur spontaneously, but should not be induced nor should stomach tube be used except on advice of physician.

Inhalation:
If discomfort is experienced from exposure to caustic mist or dust, the employee should leave the contaminated atmosphere until proper ventilation is restored and report for medical evaluation.

Skin Contact:
Wash skin area with large quantities of water. Continue washing for as long as 1 - 2 hours or until medical helf arrives. No salves/ointments should be used on chemical burns for at least 24 hours. Clothing/shoes wetted with caustic should not be worn until after they have been thoroughly washed and decontaminated. A physician should see all cases other than minor exposures.

Contact with Eyes:
If even minute quantities of caustic, solid or solution, enter the eyes, they should be irrigated immediately with copious water for a minimum of 15 minutes. Eyelids should be held apart while patient rolls eyes in circular motion during irrigation to insure contact with all tissues of eye and lid. A physician should be called in attendance at the first possible moment.

Personal Protective Equipment

Chemical Safety Goggles:
Plastic or rubber frames equipped with resistant glass or plastic lens.

Face shields:
Plastic shields may be worn in addition to goggles.

Eye wash fountains and safety showers must be immediately available. Hard hats should be worn where there is danger from falling objects. Safety shoes or rubber boots should be worn when handling caustic soda.

Fire and Explosion

General:
Caustic soda and caustic potash are non-combustible. SUL-KEM products, however, usually contain nitrate which will support combustion by supplying oxygen. Suffocating type extinguishers are of little value in fires containing nitrate.

Fire Fighting (Procedure, Equipment):
Caustic soda is non-combustible. However, fire extinguishing equipment and adequate water for fire fighting should be available to workmen in all process or storage areas for welding jobs and where combustible material of any kind is present. Workmen should be trained to prevent welding fires by thoroughly wetting down wooden scaffolds and tarps.

Spills and Leaks

Wherever caustic is stored, unloaded, handled or used, abundant water, preferably running water, should be available for emergency use in dissolving or diluting and flushing away spilled caustic. Spilled solid forms of caustic may be shoveled up, followed by flushing with water. Dilute acid, preferably acetic acid, may be used to neutralize the final traces of caustic immediately after flushing. Washing or mopping similar leaks may be followed by a liberal covering of sodium bicarbonate for removing the last traces of caustic.

Waste Disposal

Waste disposal of caustic soda depends to a great extent upon local requirements. Be sure that all federal, state, and local regulations regarding health and pollution are followed.

Waste caustic soda solution should not be discharged directly into sewers or streams. The caustic soda should first be converted to a neutral salt, as by neutralization with acid, and then well diluted with water.

Strong alkali tends to diminish bacterial activity needed for proper sewage disposal by increasing the alkalinity to unfavorable levels.

In the event of accidental spillage, advise the municipal sewage plant if the discharge will enter a municipal system or the state water pollution control board if the chemical will be discharged into state waters.

Disposal and Return Procedures (Returnable Containers)

Returnable containers should be shipped in accordance with the supplier's recommendations. Return shipment should comply with all federal, state, and Department of Transportation regulations.

Non-Returnable Containers

All residual caustic soda should be removed from the container prior to disposal.

Special Handling and Storage Procedures

The Department of Transportation has proposed an amendment to their regulations which will classify flake caustic soda as corrosive. Personal protective clothing and handling equipment should be used when handling flake caustic. Storage should be provided in an area which will not allow pick up of moisture.

DPM 5376
Stripper, Salt

SUL-KEM

SULLIVAN CHEMICAL CO., INC.

1470 W. NINTH ST.
LONG BEACH; CA. 90813
(213) 435-2332

P.O. BOX 115
STERLING HGT'S, MI. 48078
(313) 731-0793

November 3, 1978

DOUGLAS AIRCRAFT COMPANY
3855 Lakewood Blvd.
Long Beach, California

Attn: Mr. W. T. Jordan, Dept. C1-725
Materials Handling & Packaging Engineering

Gentlemen:

In reply to your request of October 19, 1978, we furnish the following:

(1) DOT Proper Shipping Name
The 74 PS is a mixture of Sodium Hydroxide (Corrosive Material-NOS) and Sodium Nitrate (Oxidizing Material-NOS). Since the primary Hazard Material is the Oxidizer, the DOT Proper Shipping Name is "OXIDIZING MATERIALS-NOS".

(2) DOT Hazard Classification
✗ Both Oxidizing and Corrosive Labels are required on the package with an Oxidizing placard required on the truck.

(3) IATA Number
None Known, Never shipped by air

Enclosed please find an OSHA Form 20, Material Safety Data Sheet with supplimental information.

If you need further information please contact the writer at your convenience.

Very truly yours,

SULLIVAN CHEMICAL COMPANY, INC.

David F. Low

DAVID F. LOW,
President

DPM 5376

Encl.

DFL/bm

DLP 74PS ORGANIC STRIPPING SALT

PRODUCT DESCRIPTION

DLP 74PS is a precisely formulated mixture of chemicals designed for optimum efficiency in removal of organic materials through thermal decomposition. The stripping salt consists of an alkali base with a major oxidizing component and a minor additive to improve viscosity.

PRODUCT APPLICATION

DLP 74 PS is used to decompose thermally any combinations of organic materials. The process consists of a highly controlled temperature gradient burning in which the organic is oxidized (burned) while at the same time the temperature of the metal parts involved is limited to less than 1000°F. Thermal distortion of the metal parts is thus held to an absolute minimum.

DLP 74PS can be successfully used for removal of almost any organic material such as acrylic, alkyd, epoxy, vinyl, plastisol, as well as finishes containing metallics. The synthetic fibers can also be decomposed in these salts.

DLP 74PS PHYSICAL PROPERTIES

Melting point		550°F
Weight	Solid	135 Lbs./cu. ft.
	Liquid	106 Lbs./cu. ft.
Specific heat		0.5
Heat of fusion		72 BTU/lb.
Operating Range		700°F to 1000°F

HAZARD DATA

DLP 74PS contains sodium hydroxide and should be handled with extreme caution at all times. In addition when it is molten all precautions common to the handling of high temperature heat treating materials should be followed. As considerable fume and flame result from the stripping operation this should be done only in suitable equipment designed specifically for this purpose.

1470 WEST NINTH STREET, LONG BEACH, CALIF. 90813 (213) 435 2332